Amendments to the Claims:

Claims 1-9 (canceled).

Claim 10 (previously amended): The method according to claim 26, wherein the die orifice is located at a lowest part of a mass in the refractory container and wherein said withdrawing step comprises positively withdrawing the ingot from below the refractory container.

Claims 11-14 (canceled).

Claim 15 (previously amended): The method according to claim 26, wherein the synthesis burner heats the surface of the melt so that the deposited silica sinters directly to glass.

Claim 16 (currently amended): A furnace for the continuous manufacture of synthetic vitreous silica glass ingot, the furnace comprising:

a furnace enclosure housing a refractory container, the container being adapted to hold a melt of synthetic vitreous silica;

a die disposed within a wall or base of the container, the die including an orifice through which the glass ingot is extruded;

moveable support means downstream of the orifice, adapted to support and facilitate withdrawal of the ingot; and

~~at least~~ one or more burners adapted to maintain ~~the~~ said melt of synthetic vitreous silica in said refractory container above its sintering temperature, ~~said~~ at least one said burner being a synthesis burner for depositing synthetic vitreous silica by vapour deposition onto a surface of the melt and having associated means for supplying silica precursor and combustion gases;

said die and moveable support means being arranged to enable continuous withdrawal of synthetic vitreous silica as an ingot of predetermined cross-sectional dimensions, defined by dimensions of said die orifice, at a rate substantially similar to that at which silica is deposited by said synthesis burner.

Claim 17 (canceled).

Claim 18 (previously added). The furnace according to claim 16, wherein the moveable support means comprises an arrangement of moveable clamps.

Claim 19 (previously amended). The furnace according to claim 18, wherein the refractory container with its die, the ingot and the arrangement of clamps are rotatable synchronously to provide a deposited glass of improved homogeneity.

Claim 20 (previously amended): The furnace according to claim 18, wherein the refractory container with its die, the ingot and the arrangement of clamps are moveable to and fro horizontally to spread a pattern of deposited glass from the burner.

Claim 21 (previously amended): The furnace according to claim 18, wherein the refractory container with its die, the ingot and the arrangement of clamps are moveable in orthogonally disposed x- and y- directions, to spread a pattern of deposited glass from said burner.

Claim 22 (previously amended): The furnace according to claim 16, wherein at least one of said burner and said refractory container are moveable to achieve spreading of a pattern of deposited silica.

Claim 23 (previously added): A furnace according to claim 18, wherein said arrangement of moveable clamps continuously grips the ingot with at least two clamps at all times to maintain straightness of an emerging ingot.

Claim 24 (previously added): A furnace according to claim 16, wherein said die orifice is made from a refractory metal and is protected by a flow of reducing gas.

Claim 25 (previously added): A furnace according to claim 16, wherein said die orifice is made from yttria-stabilized zirconia.

Claim 26 (previously added): A method of continuously forming synthetic vitreous silica glass ingot, comprising the steps of:

generating a melt of silica contained in a refractory container, part of a boundary of which defines a die orifice;

maintaining the melt in a molten state by heating the melt with one or more burners including a synthesis burner;

depositing synthesis vitreous silica from said synthesis burner by vapor deposition onto a surface of the melt; and

withdrawing synthetic vitreous silica as an ingot of predetermined cross-sectional dimensions, defined by dimensions of said die orifice, at a rate substantially similar to that at which silica is deposited by said synthesis burner.

Claim 27 (previously added): A method according to claim 26, wherein a silica precursor is supplied to said synthesis burner, and wherein said silica precursor is a chlorine-free compound of silicon.

Claim 28 (previously added): A method according to claim 28, wherein the silica precursor is selected from the group consisting of hexamethyldisiloxane, octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, and methyltrimethoxysilane.